Index of Claims



Date

Application/Control No.

10/731,806

LIU ET AL.

Reexamination

Applicant(s)/Patent under

Examiner

Art Unit

Xiuqin Sun

2863

| <b>√</b> | Rejected |
|----------|----------|
| 11       | Allowed  |

Claim

\_\_ (Through numeral)
Cancelled

Non-Elected

A Appeal

|  |       |        |  |             |     |   | 1 |  |  |     |     |     |       |        | П    |  |  |  |  |  |  |  |  |  |
|--|-------|--------|--|-------------|-----|---|---|--|--|-----|-----|-----|-------|--------|------|--|--|--|--|--|--|--|--|--|
|  | Re    | estric |  | I Interfere |     |   |   |  |  | ice |     | 0   |       | cte    | cted |  |  |  |  |  |  |  |  |  |
|  |       |        |  |             |     |   |   |  |  |     |     |     |       |        |      |  |  |  |  |  |  |  |  |  |
|  | Cla   | aim    |  | 0           | ate | е |   |  |  |     | Cla | aim | Date  |        |      |  |  |  |  |  |  |  |  |  |
|  | -inal | iginal |  |             |     |   |   |  |  |     |     |     | -inal | iginal |      |  |  |  |  |  |  |  |  |  |

| <u> </u> | 41111    | ⊢         | ,—           |          |  | <u> </u>   | <del></del>                                      |  | _               | _  |          |               | ****     | <u> </u> |          |           | _무       | uic      |          |        |        | 4        |  | 41111    | <u> </u> |          |              |  | 2011     | _              |          |          |          |
|----------|----------|-----------|--------------|----------|--|--|--|--|-----------------|--|----------|---------------|----------|----------|----------|-----------|----------|----------|----------|--------|--------|----------|--|----------|----------|----------|--------------|--|----------|----------------|----------|----------|----------|
| Final    | Original | 9/18/07   |              |          |  |  |  |  |                 |  |          | Final         | Original |          |          |           |          |          |          |        |        |          | Final  | Original |          |          |              |  |          |                |          |          |          |
| 1        | 1        | =         | Н            | $\vdash$ | Н  | t  | 1  | +  | T               | Н  |          |               | 51       |          | -        | _         | $\dashv$ | +        | +        | +      |        | 1        |  | 101      |          | $\vdash$ | ┢            |  | -        | <del>  .</del> | Н        | -        | $\dashv$ |
|          | 2        |           |              | _        |  | 1  | t  | +  | $t^-$           | Н  |          |               | 52       |          | $\vdash$ | +         | +        | $\dashv$ | $\pm$    | +      | +      | 1        |  | 102      |          |          | ┢            |  |          | $\vdash$       |          |          | $\dashv$ |
| 2        | 3        | =         | Н            | _        | 一  | ╁  | +  | ╁  | ${}^{\dagger}$  | Н  |          |               | 53       | Н        | $\dashv$ | 7         | $\dashv$ | $\dashv$ | $\top$   | 十      |        | 1        |  | 103      |          |          | <del> </del> | $\vdash$   | $\vdash$ | $\vdash$       | Н        |          | $\dashv$ |
| 3        | 4        | =         |              |          | <del>                                     </del> | <del>                                     </del> | +  | +  | +               | Н  |          |               | 54       |          | $\dashv$ | $\dashv$  | $\top$   | +        |          | +      | +      | 1        |  | 104      | _        | H        | ┢            | H  | -        |                | H        | -        | $\dashv$ |
| 4        | 5        | =         | Н            | _        | $\vdash$   | <del>                                     </del> | ┿  | +  | +               | <del>                                     </del> |          |               | 55       | _        | $\dashv$ | $\dashv$  | $\dashv$ | 十        | $\dashv$ | +      | 1-     | 1        | -  | 105      |          | -        | ┢            | $\vdash$   | -        | -              | $\dashv$ | $\vdash$ |          |
| 5        | 6        | ┇         | Н            | _        | _  | $\vdash$   | ✝  | $\top$   | $\vdash$        | П  |          |               | 56       |          |          | $\dashv$  | $\dashv$ | $\dashv$ | 十        | ┰      | _      | 1        |  | 106      |          |          | ┢            | $\vdash$   |          |                |          | $\dashv$ | $\dashv$ |
|          | Ž        |           | $\vdash$     | _        | _  | $\vdash$   | 十  | T  | ╁               | H  | ŀ        |               | 57       |          |          | 1         | +        | $\dashv$ | $\top$   | $^{-}$ | ╅      | 1        |  | 107      | _        |          | -            | ┢  |          |                | -        | $\dashv$ | $\dashv$ |
| 6        | 8        | =         | П            | $\vdash$ |  | t  | 1  | T  |                 |  |          |               | 58       |          | _        | 7         | 十        | 十        | _        |        | +      | 1        |  | 108      | -        |          | 一            | <del>                                     </del> |          | $\vdash$       |          | _        | $\dashv$ |
| 7        | 9        | =         | П            |          |  | T  | 1  | t  | 1               | Н  |          |               | 59       |          | $\neg$   | +         | $\dashv$ | 寸        | +        | ╅      | $\top$ | 1        |  | 109      | _        |          | T            | <del> </del>                                     | $\vdash$ | _              |          | $\neg$   | $\neg$   |
| 8        | 10       | =         |              |          | T  | <del>                                     </del> | †  | 1  | T               | П  | l        |               | 60       |          |          |           | _        | 寸        | 十        | ╅      |        | 1        |  | 110      | H        | Н        |              | ╁╌   | $\vdash$ | -              | $\dashv$ | $\dashv$ | ᅥ        |
| 9        | 11       | -         | П            |          | $\vdash$   | <del>                                     </del> | T  | 1 -  |                 | П  | ı        |               | 61       |          | $\neg$   |           |          | 寸        | 1        | 1      | 1      | 1        |  | 111      |          |          |              | <del> </del>                                     |          |                |          | $\dashv$ | $\neg$   |
| 10       | 12       | =         | П            |          | ┪  | T  | T  |  | T               |  |          |               | 62       |          |          | $\neg$    | 十        | $\dashv$ | $\neg$   | +      | $\neg$ | 1        |  | 112      |          |          |              | <u> </u>   | $\vdash$ | $\vdash$       |          | $\neg$   | $\dashv$ |
|          | 13       |           |              |          |  | 1  | T  | T  | Т               | П  |          |               | 63       |          |          | +         | $\dashv$ | $\dashv$ | +        | $\top$ | 1      | 1        | $\Box$   | 113      | Н        | $\vdash$ | $\vdash$     | Н  | Н        | $\vdash$       | $\dashv$ | _        | $\dashv$ |
| 11       | 14       | n         | П            | _        | <u> </u>   |  | T  | T  | 1               | П  |          |               | 64       |          | $\dashv$ | 十         | 十        | 十        | $\top$   | +      | +      | 1        | $\vdash$   | 114      |          | Н        | $\vdash$     | <del>                                     </del> | Н        | $\vdash$       | .        | $\dashv$ | $\dashv$ |
| 12       | 15       | =         |              |          |  | T  | 1  | $\top$   | $\vdash$        | П  | l        |               | 65       |          | _        | $\dashv$  | 十        | $\dashv$ | $\top$   | +-     |        | 1 ,      | $\vdash$   | 115      | $\dashv$ | $\vdash$ | _            |  | $\vdash$ | $\vdash$       |          | $\dashv$ | ᅱ        |
| 13       | 16       | =         |              |          | $\Box$   | T  | T  |  |                 | П  | ŀ        |               | 66       | $\dashv$ | _        | $\dashv$  | $\top$   | $\top$   | $\top$   | $\top$ | $\top$ | 1        | Н  | 116      |          | $\Box$   |              | $\vdash$   | Н        |                | -        | $\dashv$ | $\dashv$ |
| 14       | 17       | =         | $\Box$       |          |  |  |  | 1  | 1               | $\vdash$   | ŀ        |               | 67       |          | $\dashv$ | $\dashv$  | 十        | $\dashv$ | +        | $\top$ | 1      | 1        | $\vdash$   | 117      |          | $\vdash$ |              |  | Н        | Н              |          | $\dashv$ | $\dashv$ |
| 15       | 18       | =         | T            |          | _  | ľ  | t  | T  |                 | $\neg$   | -        |               | 68       |          | $\neg$   | $\neg$    | $\top$   | 十        | _        | $\top$ | $\top$ | 1        |  | 118      |          | $\neg$   |              |  | Н        |                | _        | $\dashv$ | ┪        |
| 16       | 19       | =         |              |          |  | -  | 1  | $\top$   |                 | П  | ı        |               | 69       |          | 寸        | $\dashv$  | _        | 寸        | $\top$   | ╅      | $\top$ | 1        |  | 119      | $\dashv$ |          | $\vdash$     | -  |          | -              | $\dashv$ | -+       | $\dashv$ |
| 17       | 20       | =         | $\Box$       |          |  |  | <u> </u>   | 1  | ╁               | _  |          |               | 70       | $\dashv$ | _        | 十         | 十        | +        | +        | $\top$ | +      | 1        | li   | 120      |          | $\neg$   | _            |  | -        | -              | _        | 一        | $\dashv$ |
|          | 21       |           |              |          |  | Ė  | $\vdash$   | Т  | _               |  | ľ        |               | 71       | _        | 7        | 7         | _        | T        | $\top$   | 1      | 1      | 1        |  | 121      | _        | $\dashv$ |              |  |          |                | $\dashv$ | 十        | $\dashv$ |
|          | 22       |           |              |          |  | Г  | $\vdash$   |  |                 |  | -        |               | 72       | _        |          | 1         |          | 十        | $\dashv$ | ╅      | +      | 1        |  | 122      |          | _        | М            | -  | $\dashv$ |                | $\neg$   | $\dashv$ | $\dashv$ |
|          | 23       |           | $\neg$       |          |  |  | <u> </u>   | t  | 1               | -  | t        |               | 73       | _        | 7        |           | +        | $\top$   | +        | +      | +-     | 1 .      |  | 123      | ┪        |          | $\vdash$     | $\vdash$   |          |                | -        | $\dashv$ | $\dashv$ |
|          | 24       |           | T            |          |  | ┢  | <del> </del>                                     | 1  |                 |  | -        |               | 74       |          | -        | _         | +        | +        | +        | +      |        | 1 1      |  | 124      | $\dashv$ |          | $\vdash$     |  |          | -              | -        | $\dashv$ | $\dashv$ |
|          | 25       |           | $\neg$       |          |  |  | <u> </u>   | 1  | $\vdash$        |  | ŀ        |               | 75       | $\dashv$ | +        | $\dashv$  | ╁        | +        | +        | ╅╴     | +      | 1        | ┝──┤   | 125      | 一        | $\dashv$ | $\vdash$     |  |          | -              |          | $\dashv$ | $\dashv$ |
|          | 26       | $\neg$    |              | -        |  | -  | <del>                                     </del> | 1  |                 |  | ŀ        |               | 76       | _        | 寸        | $\dashv$  | $\dashv$ | +        | +        | ╈      | +      | 1        | <del></del>                                      | 126      |          | -        | Н            | $\vdash$   |          |                | -        | $\dashv$ | $\dashv$ |
|          | 26<br>27 |           |              |          |  | -  | Ι-   | +-   | Н               |  | ŀ        |               | 77       |          | +        | $\dashv$  | $\dashv$ | _        | +        | ╁      | +      | 1        | $\vdash$   | 127      |          | $\dashv$ | Н            | Н  | -        | $\dashv$       | -        | $\dashv$ | $\dashv$ |
|          | 28       |           | $\dashv$     |          | _  |  | Н  | H  |                 |  | Ì        | $\neg$        | 78       | 寸        | 寸        | $\dashv$  | +        | $\top$   | +        | +      | +      | 1        | -  | 128      | $\dashv$ | $\dashv$ | $\vdash$     | $\vdash$   | -        | -              | $\dashv$ | +        | $\dashv$ |
|          | 29       |           | $\neg$       | $\neg$   |  |  | $\vdash$   | $\vdash$   | _               |  | ŀ        |               | 79       | ヿ        |          | +         | +        | +        | $\top$   | +      | +      | 1        |  | 129      | 一        | $\dashv$ | $\vdash$     |  | $\dashv$ | $\dashv$       | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 30       |           | _            |          |  |  | Г  | 1-   |                 | Н  | ŀ        |               | 80       | ┪        | 7        | 十         | $\top$   | +        | +        | +      | +      | 1 1      |  | 130      | ┪        | ┰        | $\vdash$     |  | $\dashv$ | $\dashv$       | $\dashv$ |          | $\dashv$ |
|          | 31       | $\neg$    | $\dashv$     |          |  | -  | t  | T  | -               | _  | ŀ        | <del>-</del>  | 81       | _        | $\dashv$ | $\dashv$  | +        | +        | $\top$   | +      | +      | 1 1      |  | 131      | ᅥ        | ┪        | -            | Н  | $\dashv$ | ┪              | -        | $\dashv$ | $\dashv$ |
|          | 32       |           | $\dashv$     |          |  | _  | $\vdash$   | T  |                 |  | ŀ        |               | 82       |          | _        | _         | +        | +        | +        | +      | +      | 1 1      |  | 132      | $\dashv$ | -        | $\vdash$     | -  | $\dashv$ | $\dashv$       | -+       | -+       | ╡        |
|          | 33       |           | _            | _        |  |  |  | T  | 1               | _  | ı        |               | 83       |          | +        | +         | 十        | +        | $\dashv$ | +      | +-     | 1.       |  | 133      | ┪        |          | $\vdash$     |  | ┪        | -              | -        | +        | $\dashv$ |
|          | 34       |           |              |          |  |  |  | 1  |                 | 7  | f        |               | 84       | ヿ        | 寸        | $\forall$ | $\top$   | 十        | +        | $\top$ | +      | 1        |  | 134      | -        | ┪        | $\neg$       | Н  |          | -              | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 35       |           | 7            | T        |  | -  | _  | $\vdash$   |                 | $\dashv$   | ŀ        |               | 85       |          | $\dashv$ | $\dashv$  | 十        | +        | +        | +      | 1      | 1 1      |  | 135      | ᅥ        | $\dashv$ | Н            | Н  | -        | -              | $\dashv$ | -+       | $\dashv$ |
|          | 36       | $\exists$ |              |          |  |  | <u> </u>   | <del>                                     </del> | Н               | $\dashv$   | ı        |               | 86       | $\neg$   | $\dashv$ | +         | $\top$   | 十        | +        | +      | +      | 1 1      | $\vdash$   | 136      | -        | ᅥ        | $\dashv$     | Н  | -        | $\dashv$       | -        | $\dashv$ | $\dashv$ |
|          | 37       | _         |              | $\dashv$ | $\dashv$   | Н  | T  | T  | $\vdash$        | $\dashv$   | -        | -             | 87       | +        | $\dashv$ | $\dashv$  | -        | +        | 十        | +      | +      | 1        | <del>                                     </del> | 137      |          | ᅱ        | $\dashv$     | $\vdash$   |          | $\dashv$       | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 38       | 一         | $\dashv$     | $\neg$   | $\dashv$   | H  | $\vdash$   | 一  | $\vdash$        |  | ŀ        | -             | 88       | $\dashv$ | $\dashv$ | $\dashv$  | +        | +        | +        | +      | +      | 1        | ┝──┤   | 138      |          | -        |              | Н  | -        |                | $\dashv$ | +        | $\dashv$ |
|          | 39       |           | -            |          | $\vdash$   | Т  | $\vdash$   | <del>                                     </del> | $\vdash$        | $\dashv$   | <u> </u> |               | 89       | +        | $\dashv$ | $\dashv$  | +        | 十        | +        | +      | +      | 1 1      | <del>                                     </del> | 139      | $\dashv$ | -        | $\dashv$     | H  | -        | ┥              | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 40       | $\dashv$  | -            | $\dashv$ | $\vdash$   | $\vdash$   | <del>                                     </del> | t  | H               | $\dashv$   | ŀ        |               | 90       | $\dashv$ | $\dashv$ | +         | $\dashv$ | +        | +        | +      | +      | 1 1      | $\vdash \vdash \vdash$                           | 140      | -        | -        |              | H  |          |                | -+       | +        | $\dashv$ |
|          | 41       | $\dashv$  | $\dashv$     | $\dashv$ | $\vdash$   | $\vdash$   | <del>                                     </del> | $\vdash$   | $\vdash$        | $\dashv$   | ŀ        | $\dashv$      | 91       | $\dashv$ | $\dashv$ | +         | +        | +        | +        | +      | +      | 1        | ┝┷┥  | 141      | $\dashv$ | $\dashv$ | $\dashv$     |  | $\dashv$ | $\dashv$       | -        | $\dashv$ | $\dashv$ |
|          | 42       | $\neg$    | $\dashv$     |          |  |  | <del>                                     </del> | $\vdash$   | H               |  |          | $\overline{}$ | 92       | $\dashv$ | +        | +         | +        | +        | +-       | +      | +-     | 1 1      | $\vdash$   | 142      |          | $\dashv$ | $\dashv$     | $\vdash$   | $\dashv$ | <del></del>    |          | $\dashv$ | $\dashv$ |
|          | 43       |           | -            | $\dashv$ |  | $\vdash$   |  | -  | $\vdash$        | $\dashv$   | -        |               | 93       | $\dashv$ | $\dashv$ | +         | +        | +        | +        | +      | +-     | 1 1      |  | 143      | +        | $\dashv$ | $\dashv$     |  |          | $\dashv$       | +        | +        | $\dashv$ |
|          | 44       | $\dashv$  | -            | $\dashv$ | $\dashv$   | -  | ┢  | $\vdash$   | Н               | -  | -        |               | 94       |          | $\dashv$ | +         | +        | -+       | +        | +      | +      | 1 }      |  | 144      | _        | $\dashv$ | $\dashv$     | $\vdash$   |          | .              | $\dashv$ | +        | $\dashv$ |
|          | 45       | -         | <del>-</del> | $\dashv$ | $\dashv$   | $\vdash$   | -  | ╁  | Н               | $\dashv$   | ŀ        | $\dashv$      | 95       | +        | -+       | +         | +        | +        | +        | +      | +-     | 1        |  | 144      | -        | $\dashv$ | $\dashv$     | $\dashv$   | -        |                | $\dashv$ | +        | $\dashv$ |
|          | 46       | $\dashv$  | -            |          | $\dashv$   | $\vdash$   | <del>                                     </del> | -  | ╀┤              | $\dashv$   | H        |               | 96       | $\dashv$ | +        | -+-       | +        | +        | +        | +      | +      |          |  | 146      | -+       |          | $\dashv$     | $\vdash$   | $\dashv$ | $\dashv$       |          | +        | $\dashv$ |
|          | 47       |           | -            | $\dashv$ | ᅱ  |  |  | $\vdash$   | $\vdash \vdash$ | $\dashv$   | <b>-</b> |               | 97       | -        | +        | $\dashv$  | +        | +        | +        | +      | +      | 1 }      |  | 147      | $\dashv$ | -        | -            | -  |          | $\dashv$       | -+       | +        | -        |
|          | 48       | -         |              |          | 一  | -  | _  | ┼─   | $\vdash \vdash$ | $\dashv$   | ┝        |               | 98       | -        | -+       | +         | +        |          | +        | +      | +-     |          | $\vdash$   | 148      | $\dashv$ | $\dashv$ | -            |  |          | $\dashv$       | $\dashv$ | +        | $\dashv$ |
|          | 49       | $\dashv$  |              | $\dashv$ | $\dashv$   |  | -  | $\vdash$   | $\vdash \vdash$ | $\dashv$   | ┝        |               | 99       | $\dashv$ | $\dashv$ | $\dashv$  | +        | -+-      | +        | +      |        | <b> </b> |  | 149      | -        | $\dashv$ | $\dashv$     |  | $\dashv$ |                | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 50       | -         | $\dashv$     | -+       |  | H  | $\vdash$   | $\vdash$   | ┝╾┥             | $\dashv$   | $\vdash$ |               | 100      | $\dashv$ | $\dashv$ | +         | +        | +        | +        | +      | +      |          |  | 150      | $\dashv$ | -        | $\dashv$     |  |          | $\dashv$       | $\dashv$ | +        | $\dashv$ |
|          | _00      | - 1       | - 1          |          |  |  | <u> </u>   | . !  | . 1             | - 1  | 1        |               |          | - 1      | - 1      | - 1       | - 1      | - 1      | - 1      | 1      | 1      | i I      | 1 1  | 1001     | - 1      | - 1      | - 1          |  |          | - 1            | - 1      | - 1      | - 1      |